

# **EXHIBIT “9”**

**PERINI**

Corporation

P. O. BOX 200  
CAMBRIDGE, MA 02140  
617-864-5520

Massachusetts Bay Transportation Authority  
58 Day Street  
Somerville, MA 02140

July 1, 1981  
A-601-747-67

Attention: Mr. John Carey

RE: Perini Corporation - Job 747  
Alewife Station/Garage/Tunnel  
Cambridge, MA 02140  
MBTA Contract 091-601

Subject: Release of Acid Sludge Area To 091-601 Contractor Special Provisions  
(SP-24) Section 3 Construction Phasing, Paragraph F.

Gentlemen:

We draw your attention to the above subject release of Acid Sludge Area as stated in the Contract. It appears that this area is not completely backfilled and ready to be released to us on this date as specified by the Contract. We are awaiting your written direction to proceed with our survey and layout work in this area and that all the Acid Sludge has been removed and the area and ground water is safe for our personnel to work in and around.

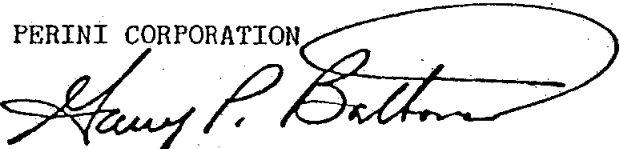
We have observed that the ground water which is entering our presently excavated Slurry Wall section is brownish in color and does not appear to be clean.

Please assure us that this situation does not present any immediate or long term dangers to our employees working in this area or deleterious to concrete.

We will await your written advise on this matter.

Very truly yours,

PERINI CORPORATION

  
Garry P. Balboni  
Administrative Manager

GPB/dea

cc: D.C. Malone  
C.J. McDermott  
J.W. Bertonazzi  
J.E. Mullin  
File  
F.M. Keville - MBTA  
G.W. Murphy - MBTA

PER1012



P. O. BOX 200  
CAMBRIDGE, MA 02140  
617-864-5520

August 8, 1981  
A-601-747-81

Massachusetts Bay Transportation Authority  
58 Day Street  
Somerville, MA 02145

Attention: Mr. John Carey

RE: Perini Corporation - Job 747  
Alewife Station/Garage/Tunnel  
Cambridge, MA 02140  
MBTA Contract 091-601

Subject: Delays in the Release of Acid Sludge Area at W.R. Grace Property

Gentlemen:

Please refer to our letter Number A-601-747-67 dated July 1, 1981 concerning the delay in the release of the Acid Sludge east of Alewife Brook Parkway. Please be informed that this delay is severely impacting the progress of this project.

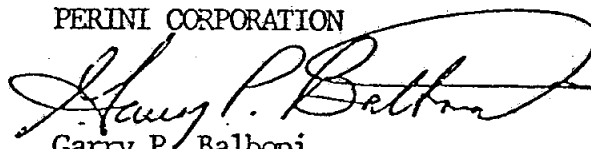
We have not received any response to our above mentioned letter informing us when this area will be turned over to us so that we may continue and plan our operations. Our Slurry Wall operation is being severely impacted by this delay.

We intend to request an extension of time and additional cost to compensate us for this delay which has created extra work for us.

We are still awaiting your written direction to proceed with our work in this area upon removal of the Soil Tek Equipment.

Very truly yours,

PERINI CORPORATION



Garry P. Balboni  
Administrative Manager

GPB/dea

cc: F.M. Keville  
G.W. Murphy  
D.C. Malone  
C.J. McDermott  
J.W. Bertonazzi  
J.E. Mullin  
File

PER0814



P. O. BOX 200  
CAMBRIDGE, MA 02140  
617-864-5520

August 24, 1981  
A-601-747-91

Massachusetts Bay Transportation Authority  
58 Day Street  
Somerville, MA 02144

Attention: Mr. John Carey

RE: Perini Corporation - Job 747  
Alewife Station/Garage/Tunnel  
Cambridge, MA 02145  
MBTA Contract 091-601

Subject: Employee Complaints of Contaminated Materials

Gentlemen:

Please be informed that on Thursday, August 20, 1980 our employees working on the east side of Alewife Brook Parkway adjacent to the W. R. Grace Plant complained of facial burns, dryness of the eyes, nose, and mouth. One employee left work and was treated by a Doctor at Tufts Medical Center for Chemical Burns of the face and mouth. MBTA Resident Engineers were informed of this situation and a meeting was set up between officials of Perini and W. R. Grace Industrial Hygienist, Mr. Paul Connor at 1:30 p.m. Thursday. It was agreed at that meeting that W.R. Grace Industrial Hygienists would discuss the situation with Perini employees at 9:00 a.m. on Friday morning. Subsequent to the meeting, we were informed by W. R. Grace that they refused to meet with our employees on Friday.

The Authority was informed of this change in position on Friday morning. Later during the morning of August 21st we were informed that W. R. Grace reconsidered after discussions with MBTA Attorneys. A meeting with our employees, Safety Officials, Managers and the Authority's Field Personnel was re-scheduled for 2:00 p.m. at the site behind W. R. Grace's Plant No. 27.

At noon on Friday, our employees again made serious complaints about unsafe working conditions in the area mentioned above. Perini Ironworkers refused to return to work in the affected area on Friday afternoon.

The meeting was held as scheduled with W. R. Grace at 2:00 pm. Mr. Tom Hamilton and Mr. Paul Connor both Industrial Hygienists along with the W. R. Grace Plant Manager came to discuss the situation. After a brief discussion of the Plant Process of making Concrete Additives (Water Reducing Agents) and the chemicals used in that process Sulfuric Acid, Formaldehyde and Naphthalene, the discussion turned to the Acid Sludge processing done by Solid-Tek.

PER0992

August 24, 1981  
Page 2 of 2

The W. R. Grace officials did not know if the treated material had been tested or if they were safe to work around when airborne. When the discussion became unruly, it was mutually decided by Mr. George Murphy of the MBTA, Mr. Bill Bertonazzi, Mr. Russell Mattson and Mr. Garry Balboni of Perini to end this meeting and to inform the group that Perini would take immediate steps to inform OSHA of the situation and to wet down the Acid Sludge Stock Piles.

We will purchase the necessary equipment and materials and install on Saturday, August 22, 1981 a watering system to wet down the two Stockpiles and the Drying Ponds to alleviate this airborne material.

We are taking further steps to sample and test this material and the ground at different elevations to determine if any additional contaminated material is still remaining. This testing will be done by an Independent Chemical Testing Laboratory. Further, OSHA will be on the site on Monday, August 24, 1981 to sample and test this material to determine if it is safe to work around.

In the event that our construction operations are delayed due to this situation, we will request a reasonable extension of time and compensation for this delay.

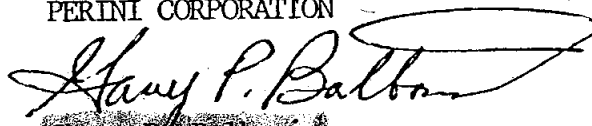
We expect payment for the emergency measures which we are taking as described above to alleviate this potentially dangerous situation.

We request that you recall your consultants who inspected this material to confirm or refute our findings as soon as possible.

We hope we can resolve this situation without costly delays to the Project and the Authority.

Very truly yours,

PERINI CORPORATION

  
Garry P. Balboni  
Administrative Manager

GPB/dea

cc: D. C. Malone  
I. R. Huie  
C. J. McDermott  
J. W. Bertonazzi  
J. E. Mullin  
R. Mattson  
J. Ferer  
F. M. Keville  
G. W. Murphy  
File

PER0993



P. O. BOX 200  
CAMBRIDGE, MA 02140  
617-864-5520

Massachusetts Bay Transportation Authority  
58 Day Street  
Somerville, MA 02144

August 25, 1981  
A-601-747-92

Attention: Mr. John Carey

RE: Perini Corporation - Job 747  
Alewife Station/Garage/Tunnel  
Cambridge, MA 02144  
MBTA Contract 091-601

Subject: Delays to the Project Caused by Contaminated Material

Gentlemen:

Please be informed that our employees have refused to work on the east side of Alewife Brook Parkway due to serious health related problems they are experiencing since exposure last week as outlined in our letter No. A-601-747-91.

An OSHA Industrial Hygenist is currently on site to monitor our sampling of soil materials and to take samples of air to be analyzed by OSHA Laboratories in Salt Lake City.

Soil samples which we have obtained will be analyzed by Energy Resources Company Laboratory in Cambridge. Information should be available within one week from date of sampling.


We are taking steps, presently to completely cover the Stockpiles of processed Solidified Sludge south of the W. R. Grace Plant to help seal off Naphthelene odors.

We expect full reimbursement for any and all cost which we incur as a result of this situation.

We will keep you informed as to the outcome of our testing. We request that a meeting be set up between all parties concerned to discuss this matter immediately.

Very truly yours,

PERINI CORPORATION

  
Garry P. Balboni  
Administrative Manager

GPB/dea

cc: F.M. Keville  
G.W. Murphy  
I.R. Huie  
D.C. Malone  
C.J. McDermott  
J.W. Bertonazzi R. Mattson  
T. Miller T. Forer

PER0994



P. O. BOX 200  
CAMBRIDGE, MA 02140  
617-864-5520

September 1, 1981  
A-601-747-98

Massachusetts Bay Transportation Authority  
58 Day Street  
Somerville, MA 02144

Attention: Mr. John Carey

RE: Perini Corporation - Job 747  
Alewife Station/Garage/Tunnel  
Cambridge, MA 02140  
MBTA Contract 091-601

Subject: Contaminated Soil & Groundwater in Area to be Excavated

Gentlemen:

Please be advised that our sampling and testing of the underlying soils in the area east of Alewife Brook Parkway between stations 313 + 23 and 317 + 50 has confirmed that the material to be excavated contains high concentrations of Naphthalene and other organic compounds in addition to having a very low pH.

This situation is in strict contradiction to the Contract Specification Section 02200, Earthwork, Sub Section 1.04A, paragraph 6 which states, "Chemical waste and contaminated groundwater present from the beginning of the Contract to Alewife Brook Parkway (approximately station 318 + 00 to station 313 + 23) shall be removed by others prior to work in this area." (emphasis added)

Auger borings taken on August 21, 1981, to a depth of 32 feet below existing ground surface have been tested by an Independent Testing Laboratory and found to contain Naphthalene levels as high as 49.9 micro grams/grams (PPM) and pH as low as 4.6. This confirms the fact that the soil material below the Acid Sludge, previously removed by others, is also contaminated with chemical wastes.

PER0996

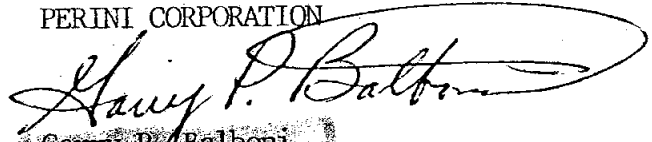
September 1, 1981  
Page 2 of 2

Please advise us how to proceed with the excavation and disposal of material in this area as soon as possible.

We will await your written direction in this matter.

Very truly yours,

PERINI CORPORATION



Garry P. Balboni  
Administrative Manager

GPB/dea

cc: F.M. Keville  
G.W. Murphy  
I.R. Huie  
D.C. Malone  
C.J. McDermott  
J.W. Bertonazzi  
J.E. Mullin  
R. Mattson  
J. Ferer  
File

PER0997



**REDACTED**

# Cambridge

VOL. 135, NO. 38

©1981 Dole Publishing Inc.

THURSDAY, SEPTEMBER 3, 1981

## Fumes force T work halt

By Mac Margolis  
Chronicle Staff

Workers suffering headaches, nosebleeds, skin irritation and vomiting last week forced a halt to work on one section of the MBTA's Alewife station construction project in northwest Cambridge.

Although the cause of the sudden ailments is still under investigation, the symptoms are very similar to those reported for some time by a number of residents of the nearby quiet, tree-lined neighborhood adjacent to the T construction site and bounded by Alewife Brook Parkway and Rindge Avenue.

Most of the local residents have already concluded that the problem comes from "that factory over there," as Janice Starke of Seagrave Road, put it. That factory is the W. R. Grace Company, a chemical manufacturing plant on Whittemore Avenue, a stone's throw from Starke's house and the T's construction



THURSDAY, SEPTEMBER 3, 1981

# force work halt at Red Line extension

instruction site complained of there were con- or Perini halted r the construc- (ob). Patterson they were ex- bway stop, the Line extension i company of d the source of erini has con- ormerly owned ty is being con-

rson said, "we been asked to e construction is complaint to l Safety and IA). An official k air and soil ment until the bled and the ups.

The state Department of Environmental Quality Engineering, also contacted by Perini, reportedly inspected the digging site and found three piles of naphthalene, a chemical substance used by the Grace company in the manufacturing process.

Naphthalene is a pungent chemical that smells a lot like mothballs (in fact, it was once the main ingredient for mothballs). Which, according to Janice Starke and neighbors, is a lot like what the area around the Grace company plant smells like. In fact, Jaqui Mendez-Diez, who lives down the street from Starke, is now circulating her second petition complaining about the odor, which she says has been in the air for years.

Cambridge City Councillor Thomas Danchy is another who is concerned about the irritating odor, which he says he can detect from his Richard Avenue home, a third of the mile from the Grace factory. Danchy called this "a serious problem, that Grace is trying to minimize."

## ge Hospital doctor in Hispanic film

fessions, and the national COSSMHO membership. In addition to his medical training at the Harvard Medical School and his postgraduate training in internal medicine at the Cambridge and Massachusetts General Hospitals, Dr. Carrillo has also studied public health at the Harvard School of Public Health.

The Hispanic community has long suffered from ill-

Mendez-Diez received a letter from a Grace company project manager dated June, 29 acknowledging the naphthalene smell and assuring her the company is "hopeful that within a reasonable period of time we will have resolved the odor problems." She said that despite company statements the odor remains.

According to DEQE officials, the human reaction to naphthalene is consistent with the symptoms reported by Perini workers and the area residents.

The Merck Index, an encyclopedia of chemicals and drugs, says ingestion or inhalation of naphthalene can induce "nausea, vomiting, headaches, ...fever, hepatic necrosis (kidney damage), convulsions and coma."

However, the Grace spokesperson noted that "there are all kinds of manufacturing companies using all kinds of chemicals" in the area surrounding the Grace plant. He said Grace this summer contracted a Georgia firm to solidify the naphthalene, which had been routinely dumped into a "settling pond" - a pond for liquid, industrial waste.

Dredged and solidified, the naphthalene was then placed into three large piles and, according to the Grace company spokesperson, will be carted away as soon as DEQE finds a waste site. Naphthalene is not classified as a hazardous waste but does require "special handling," according to DEQE Sanitary Engineer Ed Pawlowski.

Pawlowski said he toured the plant site and the surrounding area last month after receiving complaints from residents, "but I was never cognizant of a strong odor." Both Pawlowski and the Grace spokesperson also said there were no complaints from factory workers who were involved in solidifying the naphthalene.

But Pawlowski would not go as far as Grace officials who deny the company is culpable for the odor or the ailments reported by residents and workers in the vicinity. "I couldn't say it was them (Grace)," he said "But I would rule them out."

PER0689



# Buried waste tied to ills on T job

By DAVID FINK  
Staff Writer

Naphthalene, the stuff of which mothballs is made, may be the irritating culprit that caused a halt in construction work on one leg of the MBTA's Red Line extension last week.

The state Department of Environmental Quality Engineering reported yesterday that three piles of the solidified waste, apparently uncovered during construction last Wednesday or Thursday, could be the cause of eye, nose, skin and throat irritation, nausea, vomiting, and nose bleeds suffered by most of 24 Perini Company workers on the project.

The workers complained of ill health shortly after the T began a new leg of the extension project east of Alewife Brook Parkway and north of Rindge Avenue last Wednesday.

"The men began complaining about inflammation of the nose, eyes and throat and some reacted worse than others," said Perini vice president Charles J. Patterson. "Some went to the hospital for treatment and we immediately stopped work. We haven't done anything at all since last Friday."

Shortly after the workers became ill, Perini officials called the W.H. Grace Co., the chemical manufacturing concern that formerly owned the land on which the new leg of the Red Line extension is being built.

Mario Favorito, counsel for the company's industrial chemicals group, said yesterday Grace safety and toxicology experts spoke to Perini officials and the afflicted workers.

"As far as we could see, there was no connection between their symptoms and any chemical operation on the property," Favorito said.

But after the meeting, Perini officials got in touch with DEQE, which subsequently inspected the site. At the same time, an employee anonymously called the federal Occupational Safety and Health Administration, which took air samples.

Yesterday, Mary Lou Mottola, a spokeswoman for DEQE, confirmed that the three piles uncovered by the digging amounted to 12,000 to 15,000 cubic yards of naphthalene, a substance that could easily cause the workers' symptoms.

"If you inhale it and receive low dosages, it will cause headaches and

nausea," Mottola said of naphthalene. "If you're exposed for longer periods at low dosage, it will cause eye irritation. And if you're exposed for long periods at high dosages, it could cause kidney problems."

Mottola said the naphthalene piles had been re-covered with clean fill Thursday. DEQE, she added, was searching for a site to dispose of the waste product.

Informed that the naphthalene had been uncovered during the digging, Favorito said it was possible the substance had come from a Grace manufacturing operation.

"I can confirm that naphthalene is used as a raw material here," he said. "We don't make mothballs but it is used as a paint dispersant."

Paint dispersants, he said, prevent suspended color particles in paint from settling to the bottom of the mixture.

Mottola, of DEQE, said the present construction environmental impact statement conducted for the project in 1977 and 1978 "said there probably would be wastes that would have to be removed to an approved landfill."

Mottola said state and federal offi-

cials would continue their investigations to determine conclusively whether the naphthalene or another chemical was the cause of the workers' health problems.

Initially, speculation on the cause of the symptoms had centered on a settling pond into which Grace had deposited chemical wastes over the years.

But Favorito and Perini officials said yesterday that the wastes in the pond, similar to those at many chemical companies, were neutralized within the last year at the request of the T.

John Fiatarone, a federal safety and health spokesman, said air samples taken last Monday would probably not be analyzed "for some time."

A T spokesman said the project shutdown would only be temporary and was unlikely to delay the construction project.

The 3.2-mile Red Line extension estimated to cost \$600 million, will run from Harvard Square, the line's current termination point, through Porter Square to Davis Square in Somerville and on to the new terminus at Alewife Brook Parkway near Rindge Avenue and the Route 2 traffic circle.

## Acton astir over leak of Grace plant fumes

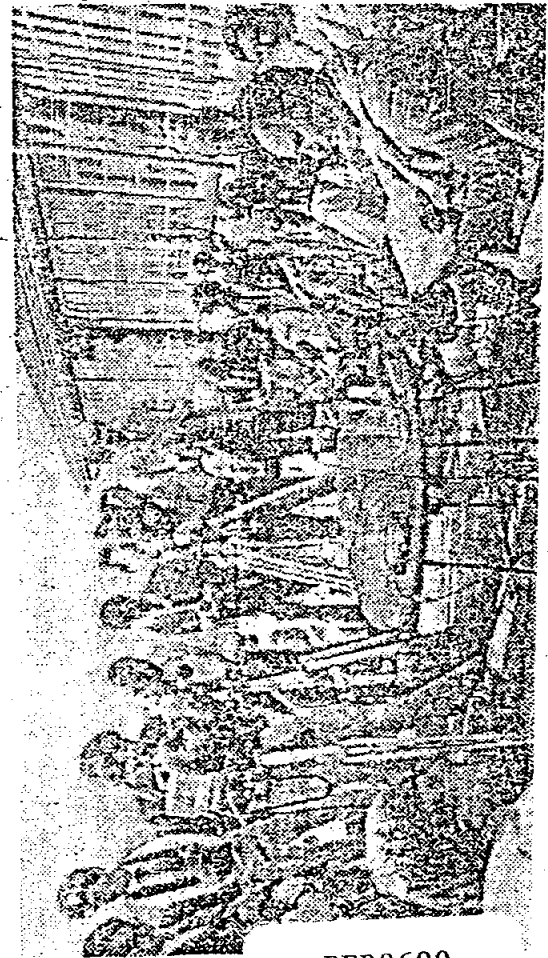
By JAMES CONNOLLY  
Staff Writer

Should police have awakened residents early yesterday morning to warn them of a potentially irritating pungent cloud of gas? Acton town officials will address that question next week.

Selectmen have scheduled a special meeting Tuesday night to hear from residents awakened by the call for voluntary evacuation after the leak of

No injuries were reported. Chris Jendras, spokesman for the U.S. Environmental Protection Agency said the leak was a "freak thing" caused by a heat-producing reaction inside the tank and a subsequent leak from a safety valve.

She said the styrene, stored at a section of the plant where Grace formerly produced synthetic rubber, was in tank with the "usual" safety precautions used by other companies.



PER0690

By David McKay Wilson

State and federal engineers have yet to certify a highly-acidic, organic chemical sludge in the Red Line Extension's path seven months after MBTA (Mass. Bay Transportation Authority) consultants discovered a chemical waste of W. R. Grace and Company at Alewife.

However, officials say tests, which are almost complete, show the sludge is too dangerous for ordinary landfill disposal. Sabin, chief, Dept., of Environmental Quality Engineering (DEQE) eastern regional engineer, said DEQE has classified the organic material as "special waste," one which must be disposed of at a hazardous waste dump.

New England has no such dump and the nearest one is in New York.

The estimated 30,000 cubic yards of sludge (a dump truck holds from seven to ten yards) lies at the end of the proposed \$60 million Red Line Extension and borders the Alewife temporary terminus.

Sabin said Grace is responsible for removing the sludge. MBTA environmental officer Charles Steward said the MBTA will wait for Grace to remove the sludge before purchasing the land for the tunnel extension.

#### Sludge danger unknown

The Grace property is east of Alewife Brook Parkway near the B & M railroad tracks.

Lord said Grace might construct a disposal area on the site or truck it out-of-state. The on-site method would use a clay enclosure, either above- or below-ground, Lord said.

Just how dangerous the sludge is has yet to be determined. Lord said toxicology standards are not set for thousands of chemicals like those at the Grace compounds included.

"The sludge may in fact be hazardous, but it seems to be material we don't have actual toxicity data on," Lord said. "Grace claims it is not hazardous. It may be nothing at all. But

even if we determine it is not hazardous, we still need a site for it. We're going to have to have it removed to prevent it from further leaching into the ground water."

Lord sent Grace a letter this month asking for a reply by July about Grace's plans for the sludge.

Steward said ground water tests by Goldberg-Zoino-Dunncliff (GZD) Associates indicate the area's groundwater "has traces of organic chemicals not normally found in the environment. We assume that the sludge has caused it."

GZD studies show that the ground water, which moves about one foot a year, flows to the Alewife Brook and eventually to the Mystic River. Cambridge Water Dept. chemist Karen Siegfriedt said there was no evidence the chemicals had entered the city's water supply at Fresh Pond, just a third of a mile away.

W. R. Grace, a diversified multinational corporation operating in 39 countries, is the nation's fifth largest chemical producer, according to Grace industrial relations spokeswoman Pat Jordan. Grace headquarters for its industrial chemical and construction product groups is located at Alewife, at the former Dewey and Almy Company site, which Grace purchased in 1954.

Grace attorney and company spokesman Allan Campbell would not comment.

Tests at the site show acid readings of PH 2 - strongly acidic. Acid that strong will eat through the proposed 33-foot wide concrete subway tunnel, Steward said. Tests also show a high sulfate level.

#### Grace: sludge harmless

DEQE, the U.S. Environmental Agency (EPA), the MBTA, and Grace are all testing the material, which Campbell last February said came from chemicals produced 10 to 15 years ago. Campbell said the sludge came from a neutralization lagoon the company used and

then covered over with earth. Campbell maintained then that any product now dumped on the site is neutral and is safe.

DEQE disagrees. Sabin said it instructed Grace to find a new way to dispose of its already-neutralized chemicals, which are periodically scooped from its present neutralization lagoon. Byproducts from the production of DAXAD, an industrial dispersing agent, are deposited into a rubber-lined outdoor lagoon filled with a neutralizing agent.

Grace then annually scoops out the neutralized chemical, which resembles sand, and deposits it on the Alewife countryside.

#### Dumping halted

Lord thinks some of the organic sludge may come from the neutralized sand dumping, which also contains organic chemicals from the lagoon.

MBTA's Steward said "Think of a bottle of pickle juice, with sand in it. When you scoop out the sand, the sand by itself is neutral, but the chemicals from the pickle brine might kill the grass. You are bound to take some of the brine with you."

Lord told Grace officials they can no longer dump the wet sand on the property and wants to see the sand dried before it is disposed of. He said Grace had been cooperative and will devise a new system.

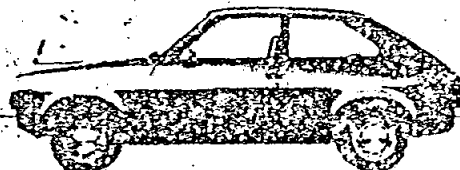
Although the sludge is 50 per cent organic and could be incinerated, Lord said the state has no incinerator suited for the job. The material could be treated with bacteria to neutralize it, but with the MBTA construction set to begin in Alewife within two years, Lord said the natural process would be too time-consuming.

Trucking the chemicals to a hazardous dump site might work, if only the state had a place to dispose the sludge. The nearest site is upper New York State and the cost of transporting 30,000 cubic yards is prohibitive, Lord said.

"We could ship it out of state," Lord said, "but the sludge is rather liquid, and we'd have to line each truck with plastic, then hope it doesn't run out down Route 2."

**Chevrolet**

**WE HAVE  
AMERICA'S LOWEST  
PRICED HATCHBACK.**



**'79 Chevy Chevette Scooter**

**AUTOMATIC DRIVE**

**\$3906**

**SAME DAY DELIVERY**

Plenty of cars and colors to choose from — cars are equipped with automatic transmission, factory AM radio, radial tires, 1.6 litre engine, all vinyl bucket seats, rack and pinion steering and other very desirable features.

PER0691



**"You Tell Me  
Which Is A  
Better Value!"**

MAKE & MODEL	LIST PRICE	FUEL TANK CAPACITY GAL.	MPG CITY/HIGH	MSRP
CHEVROLET IMPALA 8 cyl., 4 dr.	\$7499	21	20/28	\$343.75
CHEVROLET CAPRICE 8 cyl., 4 Dr.	\$7499	21	20/28	\$343.75
CHEVROLET Malibu Classic, 8 cyl., 4 Dr.	\$5999	16.1	24/32	\$753.00
CHEVROLET Malibu Classic, 8 cyl., 4 Dr.	\$5999	18.1	24/32	\$759.00
TOYOTA CORONA 4 cyl., 4 dr.	\$6449	17.2	31/39	\$759.00
TOYOTA CRESSIDA 6 cyl., 4 dr.	\$8879	16.1	26/33	\$759.00
DATSUN 810 4 cyl., 4 dr.	\$8519	15.9	31/38	\$679.00
VW Dasher 4 cyl.	\$7773	11.9	23/28	\$679.00

**INSIDE**

**Taxis in:**

**Public V**

**Gradual**

Sverdrup

Sverdrup & Parcel  
and Associates, Inc.  
225 Franklin Street  
Boston, Massachusetts 02110  
617-482-7880

Engineers  
Architects  
Planners

September 22, 1981

Massachusetts Bay Transportation Authority  
58 Day Street  
West Somerville, Massachusetts 02144

ATTENTION: Mr. John Carey

Gentlemen:

SUBJECT: MBTA/W. R. Grace Site Contamination Investigation

In response to the MBTA letter of July 9, 1981 to S&P and the MBTA authorization for S&P to pursue additional limited testing of air, soil, and water samples for the subject investigation, we herewith provide the following recommendations to protect construction workers from future skin irritations at the MBTA/W. R. Grace 091-601 construction site:

- o Direct skin contact with the groundwater and sludge residues potentially present in the soil should be avoided by use of gloves and exercise of reasonable care. If hand or arm contact is limited to soil, then work gloves and long sleeves may provide adequate protection. On the other hand, if there is a potential for contact with very wet soil or groundwater, then long rubber gloves or gloves and rain gear will be needed to adequately protect against splashing and water penetration of clothing.
- o Rubber boots should be worn whenever there is mud or standing water.
- o Workers should avoid touching their faces or other exposed skin.
- o Wash water should be immediately available at all times and used whenever a worker has been splashed or has skin contact with the soil or water.
- o Hands must be washed before eating, drinking, smoking, using sanitary facilities, or leaving the site.
- o There should be no eating, drinking, or smoking in any excavated area.
- o Face shields should be readily available and worn whenever there is a potential for splashing the face.

RECEIVED

PER1016

SEP 22 1981

NORTHWEST REGION  
Sverdrup & Parcel and Associates, Inc.  
CONSTRUCTION OFFICE

Massachusetts Bay Transportation Authority  
Page 2  
September 22, 1981

- o Contact lenses should not be worn in the excavation area without the express approval of an eye care specialist.

Further protective measures may be required if additional chemical contaminants are identified. The effectiveness of the recommended measures is, of course, dependent upon conscientious adherence to them.

Possible causes for the symptoms of nose and throat irritation and nausea were not clearly identified in this limited program. These symptoms may be associated with inhalation of airborne chemical contaminants.

An additional water sample is being analyzed and the results will be forwarded as they are available. We are currently developing a comprehensive test program to detail the chemistry of the soil in the area. We will submit this proposed program as soon as it is developed.

A further air sampling procedure should be developed to monitor the air in the vicinity of the construction work especially during excavation. Ventilation of the excavation site and other pocket areas should be considered using fans until the monitoring program justifies otherwise. We would suggest the MBTA request the contractor submit a ventilation procedure with his excavation procedure. He should size fans as appropriate for excavation areas. The adequacy of the fans selected could be reviewed by the Authority. We will include air sampling and monitoring procedures in our further test program proposal.

Very truly yours,

SVERDRUP & PARCEL AND ASSOCIATES, INC.



E. J. Perko

PER1017



*Corporation*

P. O. BOX 200  
CAMBRIDGE, MA 02140  
617-864-5520

September 25, 1981  
A-601-747-106

Massachusetts Bay Transportation Authority  
58 Day Street  
Somerville, MA 02144

Attention: Mr. John Carey

RE: Perini Corporation - Job 747  
Alewife Station/Garage/Tunnel  
Cambridge, MA 02140  
MBTA Contract 091-601

Subject: Work Site East of Alwife Brook Parkway

Gentlemen:

We acknowledge receipt of your letter no. AS-601-57 dated Sept. 23, 1981.

It is apparent by your letter and the attached letter from Sverdrup & Parcel & Assoc. dated September 22, 1981, that your testing of soils and groundwater in the area east of Alewife Brook Parkway has determined that the material and groundwater are contaminated with chemicals which may be harmful to our employees working in and around the site.

The protective measures which your above referenced letter describes, concur with those previously recommended to us by the Industrial Hygienist retained by Perini to consult on this problem.

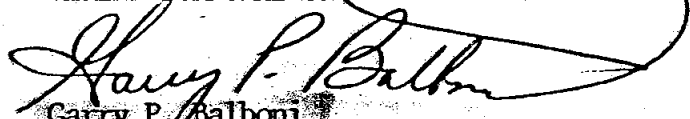
Please be informed that we feel all the added protective measures described in your letter are beyond the scope of this contract and we are entitled to additional compensation for them.

We will submit the extra cost of these measures when the full impact of this additional work is known.

We are still awaiting your written direction as to the condition and status of soil in this area, so that we may proceed with our work.

Very truly yours,

PERINI CORPORATION

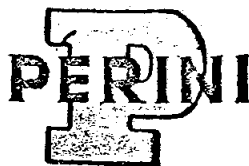
  
Harry P. Balboni  
Administrative Manager

GPB/dea

cc: F.M. Keville D.C. Malone  
J. Dyer C.J. McDermott

PER0999

**REDACTED**



*Corporation*

P. O. BOX 200  
CAMBRIDGE, MA 02140  
617-864-5520

October 23, 1981  
A-601-747-116

Massachusetts Bay Transportation Authority  
58 Day Street  
Somerville, MA 02145

Attention: Mr. John Carey

RE: Perini Corporation - Job 747  
Alewife Station/Garage/Tunnel  
Cambridge, MA 02140  
MBTA Contract 091-601

Subject: Work Stoppage on East Side of Alewife Brook Parkway Due to  
Contaminated Material

Gentlemen:

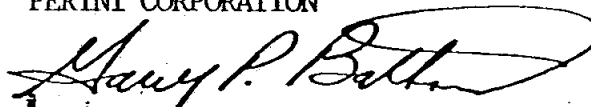
Please be informed that as of October 26, 1981 all construction work has stopped on the east side of Alewife Brook Parkway on the above referenced project due to the contaminated material as yet unclassified by the Mass. Department of Environmental Quality Engineering and the MBTA.

As you are aware from earlier correspondence, the existing ground soil has been contaminated by Acid Sludge previously placed there by W. R. Grace Chemical Company. This situation has created delays and extra work for which we expect additional compensation for. We have now completed all Slurry Wall operations on the east side and stockpiled all excavated contaminated material on site.

We will await your consultants test results, DEQE classification of material, and your written direction on how to proceed in this area prior to remobilizing our operations on the east side.

Please inform us immediately on any further developments concerning this matter.

Very truly yours,  
PERINI CORPORATION

  
Harry P. Balboni  
Administrative Manager

GPB/dea

cc: F.M. Keville

J. Dyer

H. Haywood

T D U.S.

D.C. Malone

C.J. McDermott

J.W. Bertonazzi

J.E. Mullins

PER0964





*Corporation*

P. O. BOX 200  
CAMBRIDGE, MA 02140  
617-864-5520

November 4, 1981  
A-601-747-125

Massachusetts Bay Transportation Authority  
58 Day Street  
Somerville, MA 02145

Attention: Mr. John Carey

RE: Perini Corporation - Job 747  
Alewife Station/Garage/Tunnel  
Cambridge, MA 02140  
MBTA Contract 091-601

Subject: Delays to East Side of Project Caused by Contaminated  
Soil Conditions

Gentlemen:

We acknowledge receipt of your letter dated October 27, 1981 concerning this subject.

As a matter of record, I wish to point out that on Monday, October 26, 1981, Slurry Panel No. 117 was poured and excavation began on the final Slurry Panel on the east side No. 113.

On Tuesday, October 27, 1981, excavation was completed by 10:00 a.m. and the concrete was poured and completed by about noon. As you are aware, all excavated slurry material has been stockpiled on site and rehandled so that this portion of the work would not be delayed. As we have previously discussed, all additional costs for stockpiling, rehandling, and extra disposal will be requested for payment as extra work.

We wish to remind the Authority that should this material be classified as hazardous, special or solid waste by the Mass. D.E.Q.E., the time to arrange a disposal site may be substantial. We have been awaiting test results of this material from your consultants for over a month. This delay is pushing more of our work into the more costly winter months and thereby further compounding the problem.

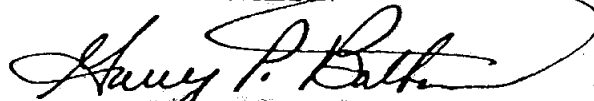
PER1000

Page 2

Please continue to expedite these results as much as possible so as to minimize this delay and its cost impact on this project.

Very truly yours,

PERINI CORPORATION



Garry P. Balboni  
Administrative Manager

GPB/dea

cc: F.M. Keville  
J.D. Dyer  
H. Haywood  
I.R. Huie  
D.C. Malone  
C.J. McDermott  
J.W. Bertonazzi  
J.E. Mullin  
File

PER1001



P. O. BOX 200  
CAMBRIDGE, MA 02140  
617-864-5520

November 16, 1981  
A-601-747-131

Massachusetts Bay Transportation Authority  
58 Day Street  
Somerville, MA 02145

Attention: Mr. John Carey

RE: Perini Corporation - Job 747  
Alewife Station/Garage/Tunnel  
Cambridge, MA 02140  
MBTA Contract 091-601

Subject: Notice of Excavation and Stockpiling Contaminated Material

Gentlemen:

Confirming prior verbal conversations between Perini and the MBTA, we have begun to excavate the Tunnel and the Contaminated Material and temporarily stockpile this material on site. We shall perform this excavation, stockpiling, and rehandling until a final determination is made by the Mass. Department of Environmental Quality Engineering and the Authority as to its contamination classification.

We expect additional compensation for the stockpiling, rehandling, reloading and additional transportation cost of this material.


Very truly yours,

PERINI CORPORATION

  
Garry P. Balboni  
Administrative Manager

GPB/dea

cc: F.M. Keville  
J.J. Dyer  
H. Haywood  
D.C. Malone  
C.J. McDermott  
J.W. Bertonazzi  
J.E. Mullin  
File



PER0965